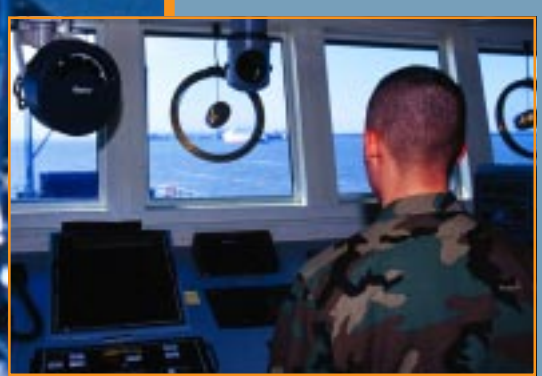
Soldiers Online

Trainee mariner PV2 Nicholas Leger *(left)* steers the USAV *Perryville* as her master, WO1 Patrick W. Deck, takes the vessel down the James River toward Chesapeake Bay.

Training Army Mariners

Story and Photos by Steve Harding



Aboard *Perryville* for a three-day exercise, Leger and other student watercraft operators put to the test many skills they'd previously practiced in Fort Eustis classrooms.

IT was a big moment for PV2 Nicholas Leger. The young soldier stepped up and wrapped his hands around the large control wheel on the bridge of the utility landing craft *Perryville* and, under the watchful eyes of her master, turned the ship's bow toward Chesapeake Bay.

For Leger and other student watercraft operators at the U.S. Army Transportation School at Fort Eustis, Va., *Perryville's* slow progress down the James River marked the start of a three-day field training exercise that would put to the test many of the skills they'd thus far only practiced in the classroom. It was also something of a milestone, for it meant that the young soldiers were one step closer to joining one of the least-known career fields in the Army.

Preparing Soldiers for Sea

Though better known for its armored vehicles and attack helicopters, the Army is also a major operator of watercraft of all sizes. Manned by active-duty and reserve-component soldiers, the service's extensive fleet of landing craft, tugboats, floating cranes, logistics-support vessels and other craft carry out many missions around the world.

"The simple fact is that

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A student mariner on lookout duty scans the waters off *Perryville's* starboard side. The vessels in the distance are part of the federal government's James River Reserve Fleet.

Training Army Mariners

U.S. military operations in any theater bounded by water cannot be undertaken without Army watercraft," said Joseph Thornton, chief of the Transportation School's Marine and Terminal Training Department. "And it's our job to see that the Army has the well-trained enlisted soldiers and warrant officers it needs to perform those missions."

Thornton and his cadre of military and civilian instructors train enlisted soldiers and warrants in two major areas: as watercraft operators and as watercraft engineers. And, given the nature of the job, the training in both areas is rigorous and extensive.

"Students in our courses are truly subjected to 'information overload,'" Thornton said, "and with good reason. Even in the best of times, the sea is a challenging and unpredictable 'battlefield,' and Army mariners must be ready to undertake a much broader range of duties aboard ship than do their Navy counterparts."

In the Navy, Thornton explained, a sailor has one primary job. A radioman is a radioman, for example, and doesn't have anything to do with the actual operation of the ship. Each soldier aboard an Army vessel, on the other hand, may have up to six jobs to carry out on the operations side, and as many as nine on the engineering side.

A Two-Track System

While some young people coming into the Army watercraft field have previous maritime experience, Thornton said, most do not. So the training for both areas of specialization — deck operations and engineering — follows the same in-depth pattern at both the enlisted and warrant officer levels.

"The enlisted folks first go through what we call the 10-level course, which is six weeks for the deck soldiers and eight weeks for the engineers," Thornton said. "This is the time when they learn the basics of their craft."

***Perryville* crewmember SSG Todd Hall *(left)* marks the vessel's position as a student looks on.**

Under a crewmember's watchful eye, student mariners standing on *Perryville's* large cargo deck loosen up the lines that hold the vessel alongside another LCU.

For the deck operations soldiers, the basics include seamanship, navigation and communications, while engineering students learn the fundamentals of such subjects as marine electrical systems, propulsion, maintenance, hull repair and damage-control operations.

Once the soldiers complete the 10-level training they are assigned to field units, where they stay until they make E-4. They are then brought back to Fort Eustis for the 20-level course, which many Army specialties don't have. In that course the soldiers get what Thornton called "another heavy dose" of additional training.

After successfully completing the 20-level course, Army mariners go back to field units until they make sergeant. At that point they return to Fort Eustis for BNCOC. Upon completion of the core subjects common to all BNCOC courses, the Army mariners get still more seamanship and navigation training on the deck side, and advanced engineering on the engineer side. And the pattern is repeated as soldiers are promoted and return to Fort Eustis for ANCOC.

"We have two of the longest warrant officer training courses in the Army," Thornton said. "On the deck side, they're here for 32 weeks, and the engineers are here for 39 weeks."

"We're one of the few Army specialties that does new-task training at both the BNCOC and ANCOC levels," Thornton said. "And just as importantly, we're one of the few Army specialties that has licensing and certification requirements at each of those levels. The certification is part of the training we do here, and the licensing occurs when the soldiers serve on each specific type of vessel."

The system is essentially the same for warrant officer mariners, Thornton said.

"Our goal is to recruit soldiers with eight to 12 years in the field into the warrant officer community. We don't draw exclusively from Army enlisted folks; we get a lot of Navy folks who are looking to come into the Army watercraft field, and we also get some from the Coast Guard. And, on the engineering side, we get some people coming out of the Army engineering field.

"We have two of the longest warrant officer training courses in the Army," Thornton said. "On the deck side, they're here for 32 weeks, and the engineers are here for 39 weeks. And just like the enlisted soldiers, the warrant officers get a tremendous amount of information and training. To say it's challenging is an understatement."

Once the warrant officers graduate from the training, they go to the units and are licensed and certified at the A-1 level to operate such vessels as the LCU and certain tugs. When warrant officers complete the A-2 level of advanced training, they broaden their skills and knowledge base yet again and are qualified to operate the Army's larger vessels — the LSVs and large tugs. Once picked up for CW3, warrant officers return to Fort Eustis for more training, although at that point most of the instruction focuses on leadership and staff skills.

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The tug *Fort Stanwix* maneuvers alongside the logistics support vessel *Specialist Four James A. Loux* at Fort Eustis. Mariners trained at the post will go on to crew both types of vessels.

In addition to training new Army watercraft soldiers, the Transportation School also offers advanced and refresher courses for experienced mariners.

Tough and Realistic Training

"We honestly think that our deck and engineering training programs here at the Transportation School are among the best in the country — civilian or military," Thornton said. "The training is thorough and comprehensive, and it can be very challenging."

And that challenge can be something of a surprise for some prospective mariners, said CW4 Wayne J. Morgan, chief of the Marine Operations Division.

"A lot of the people who come into this MOS do it because they think it sounds like an interesting and unique line of work," Morgan said. "And the majority of them enjoy it. They end up getting to travel and see a lot of different places. But it's also a field that requires a tremendous amount of individual responsibility for everyone, both enlisted and warrant officer. And the nature of our training reflects that."

"Our courses are tough," agreed engineering instructor CW3 Timothy D. Emmons, "and not everyone makes it through. But we're not here to fail students; we're here to produce competent and skilled mariners who can ensure the safety of their vessels and the success of the mission. And we think we do an excellent job."

Bringing It All Together

Back aboard the *Perryville*, student mariner Leger agreed that the training he'd received so far was "absolutely the best."

"Sure it's difficult at times, but the instructors really want to see you succeed," he said. "And all of the tough hours in the classroom really come together when you get out here on the vessel. Everybody on this ship's crew is very helpful, and getting a chance to actually do what we've been learning about really brings it all into focus."

That's a point *Perryville's* master, WO1 Patrick W. Deck, wholeheartedly agreed with.

"I've been in the Army watercraft field for more than 12 years, enlisted and warrant, and I think it's tremendously valuable for these young soldiers to come aboard and actually spend time doing the various jobs," Deck said. "They're a little reserved when they first come aboard, but that's understandable. A couple of months ago, most of them were civilians, and now they find themselves under way. This hands-on training really gives them a chance to put into practice what they've been learning for the past few months.

"I love being an Army mariner," Deck added, "and I love being able to help bring new soldiers into the field. These kids are the future of Army watercraft, and I think we're all more than happy to do whatever we can to help make them the best mariners they can be." □

Going to Sea in Simulation

Seven ceiling-mounted projectors ensure that the "outside" view from Fort Eustis' state-of-the-art Vessel Bridge Simulator is startlingly realistic.

Story and Photo by Steve Harding

SOME of the most challenging voyages undertaken by mariners training at the U.S. Army Transportation School take place on dry land, inside a nondescript brick building not far from Fort Eustis' small harbor.

The building is home to the school's Vessel Bridge Simulator, a state-of-the-art facility used to teach and reinforce maneuvering techniques, rehearse upcoming missions and orient new personnel to particular vessels. Users run the gamut from brand new student mariners to the most experienced vessel masters. The facility is fully accredited and licensed by the U.S. Coast Guard, and teaches many of the same courses found in civilian merchant marine academies.

The simulator's centerpiece is a generic ship's bridge, complete with forward, side and rear windows. The structure's fully functioning helm, throttles, radios, radars and complete navigation station allow students to practice operating the three largest types of Army watercraft — the LCU-2000, LSV and large tug — as well as several types of non-Army sealift ships. In addition, "virtual spotlights," "virtual binoculars" and head-mounted displays allow students to scan their simulated surroundings.

Those surroundings appear courtesy of seven ceiling-mounted projectors, which provide a 270-degree view forward and to the sides of the bridge, and 90 degrees aft through the rear-facing windows. Though the simulator does not move, motion in the projected images correlates to the simulated sea state and the control inputs made by the students. The resultant perceived motion is so real that students using the simulator unconsciously brace themselves for the simulated vessel's "movements." Occasional seasickness is also not unheard of.

The stunningly realistic images are produced by networked computers. Instructors sitting at a nearby bank of monitors can control every aspect of the simulation, see every image the students are seeing, and monitor the students' actions within the enclosed simulator via closed-circuit TV.

"We can control everything from here," said instructor SSG Donald Cochran. "We can alter the weather and the time of day, change the vessel's location, and insert other vessels into the simulation." Instructors can "place" the simulated bridge in some 20 locations in which Army watercraft actually operate, from Chesapeake Bay to Tokyo Bay.

"We can control everything from here," said instructor SSG Donald Cochran. "We can alter the weather and the time of day, change the vessel's location, and insert other vessels into the simulation."

"The company that produced the software for the simulator based the visuals on actual charts and photographs of the real areas," Cochran said. "And if we need to add a new location — say a port that Army watercraft are expected to deploy to — we can do that within about two weeks."

The advanced system also allows instructors to record every aspect of each simulation for later review.

"We can replay everything that was done," Cochran said. "After every simulation, we sit down as a group and discuss what happened. We talk about what went right, and we talk about things that could have gone better."

The Fort Eustis facility will ultimately include a small-craft simulator that will emulate the landing craft, small tugs and similar vessels in the Army fleet. Once that simulator has been installed, Cochran said, it will be able to interact with the existing simulator. This will allow the crews of both simulators to conduct cooperative training entirely in the virtual world. Ultimately, Cochran said, upgrades will allow soldiers using the Fort Eustis vessel simulators to participate in "distributed simulations" in which mariners will be able to interact with aviators or tankers training in their own simulators at other posts.

"I've been involved in simulator training since 1986," Cochran said, "and this is the ultimate in any kind of training that I've ever done. This VBS is literally the state of the art." □

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